

WHAT IS CLAIMED IS:

1. A camera unit comprising:

a flexible substrate including at least an electrode region and an image pickup device region
5 formed on the same surface thereof;

a driving electrode portion disposed on the electrode region and including a plurality of electrodes arranged along a predetermined direction;

10 an image pickup device disposed on the image pickup device region;

stationary unit attaching portions disposed at positions surrounding the image pickup device region;

15 a stationary unit frame which is attached to the stationary unit attaching portions and extended in the predetermined direction; and

movable units which are reciprocatingly driven in the stationary unit frame in the predetermined direction by the driving electrode portion and support a lens respectively,

20 wherein the flexible substrate is bent along a bending portion between the electrode region and the image pickup device region, the electrode region is fixed on a side of the stationary unit frame inwardly thereof, and the image pickup device region is fixed on
25 an end surface of the stationary unit frame toward the movable units.

2. A camera unit according to claim 1, wherein

the flexible substrate further comprises an electrode
part mounting region disposed adjacent to the image
pickup device region and bent along a bending portion
between the image pickup device region and the
5 electrode part mounting region, and the electrode part
mounting region is fixed on a side of the stationary
unit frame inwardly thereof.

3. A camera unit according to claim 1, wherein
the flexible substrate comprises a resin sheet and
10 metal leads, and at least a part of the resin sheet is
cut off at the bending portion.

4. A camera unit according to claim 1, wherein a
driver which generates a driving high voltage applied
to the driving electrode portion is disposed in the
15 vicinity of the electrode region.

5. A camera unit according to claim 4, wherein
the driver is disposed at a position along a direction
perpendicular to the predetermined direction with
respect to the electrode region.

20 6. A method of manufacturing a camera unit
comprising a stationary unit and movable units which
are reciprocatingly driven in the stationary unit along
a predetermined direction and support a lens respec-
tively, the stationary unit comprising a flexible
25 substrate including at least an electrode region, on
which a driving electrode portion is mounted, and an
image pickup device region, on which an image pickup

device and a stationary unit frame are mounted, on the same surface thereof, the method comprising:

attaching the stationary unit frame to the image pickup device region;

5 bending the flexible substrate along a bending portion between the electrode region and the image pickup device region;

fixing the electrode region to a side of the stationary unit frame inwardly thereof; and

10 fixing the image pickup device region on the end surface of the stationary unit frame toward the movable units.

7. A method of manufacturing a camera unit comprising a stationary unit and movable units which
15 are reciprocatingly driven in the stationary unit along a predetermined direction and support a lens, the stationary unit comprising a flexible substrate including at least an electrode region, on which a driving electrode portion is mounted, an image pickup
20 device region, on which an image pickup device and a stationary unit frame are mounted, and a switching device region, on which a switching device is mounted, on the same surface thereof, the method comprising:

attaching the stationary unit frame to the image
25 pickup device region;

 bending the soft substrate along a bending portion between the electrode region and the image pickup

device region;

bending the flexible substrate along a bending portion between the electrode region and the switching device region;

5 fixing the electrode region to a side of the stationary unit frame inwardly thereof;

fixing the image pickup device region on an end surface of the stationary unit frame toward the movable units; and

10 fixing the switching device region on the end surface of the stationary unit frame toward the movable units.